

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims:

1. (Currently Amended) A grafted antibody, or functional fragment thereof, comprising the following one or more complementarity determining regions (CDRs); ~~having at least one amino acid substitution in a CDR selected from the group consisting of SEQ ID NOS:26, 28, 30, 20, 22 and 24, SEQ ID NO:26; SEQ ID NO:28; SEQ ID NO:30; SEQ ID NO:20; SEQ ID NO:22; and SEQ ID NO:24; wherein at least one of said CDRs has at least one amino acid substitution, and wherein said grafted antibody or functional fragment thereof has at least a two-fold higher specific-binding activity for denatured collagen over native collagen a cryptic collagen epitope.~~

2. (Currently Amended) An antibody, or functional fragment thereof, comprising ~~six one or more~~ CDRs selected from the group consisting of CDRs referenced as SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, and SEQ ID NO:162, said antibody or functional fragment thereof having at least a two-fold higher specific-binding activity for denatured collagen over native collagen a cryptic collagen epitope.

3. (Previously Presented) The antibody, or functional fragment thereof, of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:26; a heavy chain CDR2 referenced as SEQ ID NO:28; a heavy chain CDR3 referenced as SEQ

ID NO:63; a light chain CDR1 referenced as SEQ ID NO:20; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

4. (Withdrawn) The antibody of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:26; a heavy chain CDR2 referenced as SEQ ID NO:28; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:72; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

5. (Withdrawn) The antibody of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:26; a heavy chain CDR2 referenced as SEQ ID NO:48; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:20; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

6. (Withdrawn) The antibody of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:45; a heavy chain CDR2 referenced as SEQ ID NO:154; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:157; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

7. (Withdrawn) The antibody of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:26; a heavy chain CDR2 referenced as SEQ ID NO:155; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:158; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

8. (Withdrawn) The antibody of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:46; a heavy chain CDR2

referenced as SEQ ID NO:155; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:159; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

9. (Withdrawn) The antibody of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:26; a heavy chain CDR2 referenced as SEQ ID NO:48; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:160; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

10. (Withdrawn) The antibody of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:45; a heavy chain CDR2 referenced as SEQ ID NO:155; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:72; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

11. (Withdrawn) The antibody of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:26; a heavy chain CDR2 referenced as SEQ ID NO:155; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:157; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

12. (Withdrawn) The antibody of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:45; a heavy chain CDR2 referenced as SEQ ID NO:155; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:160; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

13. (Withdrawn) The antibody of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:46; a heavy chain CDR2 referenced as SEQ ID NO:155; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:160; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

14. (Withdrawn) The antibody of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:45; a heavy chain CDR2 referenced as SEQ ID NO:162; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:158; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

15. (Withdrawn) The antibody of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:45; a heavy chain CDR2 referenced as SEQ ID NO:156; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:157; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

16. (Withdrawn) The antibody of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:26; a heavy chain CDR2 referenced as SEQ ID NO:154; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:157; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

17. (Previously Presented) The antibody, or functional fragment thereof, of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:45; a heavy chain CDR2 referenced as SEQ ID NO:155; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:157; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

18. (Withdrawn) The antibody of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:46; a heavy chain CDR2 referenced as SEQ ID NO:154; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:161; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

19. (Withdrawn) The antibody of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:46; a heavy chain CDR2 referenced as SEQ ID NO:156; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:161; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

20. (Withdrawn) The antibody of claim 2, wherein said antibody, or functional fragment thereof, comprises a heavy chain CDR1 referenced as SEQ ID NO:46; a heavy chain CDR2 referenced as SEQ ID NO:28; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:20; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

21. (Currently Amended) An antibody, or functional fragment thereof, comprising a heavy chain polypeptide comprising a first, second and third CDR, one or more CDRs, said first heavy chain polypeptide having at least one amino acid substitution in a CDR selected from the group consisting of SEQ ID NOS:26, 43, 44, 45, 46, and 47, said second CDR selected from the group consisting of SEQ ID NOS:28, 48, 49, 50, 51, 52, 53, 54, and 55, and said third CDR selected from the group consisting of SEQ ID NOS:30, 56, 57, 58, 59, 60, 61, 62, 63, and 64, wherein at least one of said CDRs has at least one amino acid substitution, and CDRs referenced as SEQ ID NOS:26, 43, 44, 45, 46, 47, 28, 48, 49, 50, 51, 52, 53, 54, 55, 30, 56, 57, 58, 59, 60, 61, 62, 63, and 64, wherein said antibody or functional fragment thereof has at least a two-fold higher specific binding activity for denatured collagen over native collagen ~~cryptic collagen epitope~~.

22. (Currently Amended) An antibody, or functional fragment thereof, comprising a light chain polypeptide comprising a first, second, and third CDR, said first one or more CDRs, said light chain polypeptide having at least one amino acid substitution in a CDR selected from the group consisting of CDRs referenced as SEQ ID NOS:20, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, and 76, said second CDR consisting of SEQ ID NO:22, and said third CDR selected from the group consisting of SEQ ID NOS: 24, 77, 78, 79, 80, 81, 82, 83, 84, 85, and 86, wherein at least one of said CDRs has at least one amino acid substitution, and 76, 22, 24, 77, 78, 79, 80, 81, 82, 83, 84, 85, and 86, wherein said antibody or functional fragment thereof has at least a two-fold higher specific binding activity for denatured collagen over native collagen-a cryptic collagen epitope.

Claims 23-41 (Canceled).

42. (Previously Presented) The functional fragment of any of claims 1-22, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab)₂ and scFV.

43. (Previously Presented) A nucleic acid encoding the antibody of any of claims 1-22.

44. (Withdrawn) A method of targeting angiogenic vasculature, comprising administering an antibody, or functional fragment thereof, said antibody or functional fragment thereof comprising one or more complementarity determining regions (CDRs) having at least one amino acid substitution in one or more CDRs of a heavy chain CDR selected from the group consisting of SEQ ID NOS:26, 28 and 30 or a light chain CDR selected from the group consisting of SEQ ID NOS:20, 22 and 24, and said antibody or functional fragment thereof having specific binding activity for a cryptic collagen epitope.

45. (Withdrawn) The method of claim 44, wherein said antibody or functional fragment comprises one or more CDRs selected from the group consisting of CDRs referenced as SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID

NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, and SEQ ID NO:162.

46. (Withdrawn) The method of claim 44, wherein said antibody, or functional fragment thereof, further comprises a therapeutic moiety.

47. (Withdrawn) The method of claim 44, wherein said antibody, or functional fragment thereof, further comprises a detectable moiety.

48. (Withdrawn) A method of inhibiting angiogenesis, comprising administering an antibody, or functional fragment thereof, said antibody or functional fragment thereof comprising one or more complementarity determining regions (CDRs) having at least one amino acid substitution in one or more CDRs of a heavy chain CDR selected from the group consisting of SEQ ID NOS:26, 28 and 30 or a light chain CDR selected from the group consisting of SEQ ID NOS:20, 22 and 24, and said antibody or functional fragment thereof having specific binding activity for a cryptic collagen epitope.

49. (Withdrawn) The method of claim 48, wherein said antibody or functional fragment comprises one or more CDRs selected from the group consisting of CDRs referenced as SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID

NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, and SEQ ID NO:162.

50. (Withdrawn) The method of claim 48, wherein said antibody, or functional fragment thereof, further comprises a therapeutic moiety.

51. (Withdrawn) A method of targeting a tumor, comprising administering an antibody, or functional fragment thereof, said antibody or functional fragment thereof comprising one or more complementarity determining regions (CDRs) having at least one amino acid substitution in one or more CDRs of a heavy chain CDR selected from the group consisting of SEQ ID NOS:26, 28 and 30 or a light chain CDR selected from the group consisting of SEQ ID NOS:20, 22 and 24, and said antibody or functional fragment thereof having specific binding activity for a cryptic collagen epitope.

52. (Withdrawn) The method of claim 51, wherein said antibody or functional fragment comprises one or more CDRs selected from the group consisting of CDRs referenced as SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, and SEQ ID NO:162.

53. (Withdrawn) The method of claim 51, wherein said antibody, or functional fragment thereof, further comprises a therapeutic moiety.

54. (Withdrawn) The method of claim 51, wherein said antibody, or functional fragment thereof, further comprises a detectable moiety.

55. (Withdrawn) A method of inhibiting tumor growth, comprising administering an antibody, or functional fragment thereof, said antibody or functional fragment thereof comprising one or more complementarity determining regions (CDRs) having at least one amino acid substitution in one or more CDRs of a heavy chain CDR selected from the group consisting of SEQ ID NOS:26, 28 and 30 or a light chain CDR selected from the group consisting of SEQ ID NOS:20, 22 and 24, and said antibody or functional fragment thereof having specific binding activity for a cryptic collagen epitope.

56. (Withdrawn) The method of claim 55, wherein said antibody or functional fragment comprises one or more CDRs selected from the group consisting of CDRs referenced as SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, and SEQ ID NO:162.

57. (Withdrawn) The method of claim 55, wherein said antibody, or functional fragment thereof, further comprises a therapeutic moiety.

58. (Withdrawn) A method of detecting angiogenic vasculature, comprising contacting angiogenic vasculature with an antibody, or functional fragment thereof, said antibody or functional fragment thereof comprising one or more complementarity determining regions (CDRs) having at least one amino acid substitution in one or more CDRs of a heavy chain CDR selected from the group consisting of SEQ ID NOS:26, 28 and 30 or a light chain CDR selected from the group consisting of SEQ ID NOS:20, 22 and 24, and said antibody or functional fragment thereof having specific binding activity for a cryptic collagen epitope.

59. (Withdrawn) The method of claim 58, wherein said antibody or functional fragment comprises one or more CDRs selected from the group consisting of CDRs referenced as SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, and SEQ ID NO:162.

60. (Withdrawn) The method of claim 58, wherein said antibody, or functional fragment thereof, further comprises a detectable moiety.

61. (Withdrawn) A method of inhibiting metastasis, comprising administering an antibody, or functional fragment thereof, said antibody or functional fragment thereof comprising one or more complementarity determining regions (CDRs) having at least one amino acid substitution in one or more CDRs of a heavy chain CDR selected from the group consisting of SEQ ID NOS:26, 28 and 30 or a light chain CDR selected from the group consisting of SEQ ID NOS:20, 22 and 24, and said

antibody or functional fragment thereof having specific binding activity for a cryptic collagen epitope.

62. (Withdrawn) The method of claim 61, wherein said antibody or functional fragment comprises one or more CDRs selected from the group consisting of CDRs referenced as SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, and SEQ ID NO:162.

63. (Withdrawn) The method of claim 61, wherein said antibody, or functional fragment thereof, further comprises a therapeutic moiety.

Claims 64-83 (Canceled).

84. (New) An antibody, or functional fragment thereof, comprising six CDRs, wherein said CDRs are selected from the group consisting of: amino acids 6-10 of SEQ ID NO:26; SEQ ID NO:28; SEQ ID NO:30; SEQ ID NO:20; SEQ ID NO:22; SEQ ID NO:24; amino acids 6-10 of SEQ ID NO:43; amino acids 6-10 of SEQ ID NO:44; amino acids 6-10 of SEQ ID NO:45; amino acids 6-10 of SEQ ID NO:46; amino acids 6-10 of SEQ ID NO:47; SEQ ID NO:48; SEQ ID NO:49; SEQ ID NO:50; SEQ ID NO:51; SEQ ID NO:52; SEQ ID NO:53; SEQ ID NO:54; SEQ ID NO:55; SEQ ID NO:56; SEQ ID NO:57; SEQ ID NO:58; SEQ ID NO:59; SEQ ID NO:60; SEQ ID NO:61; SEQ ID NO:62; SEQ ID NO:63; SEQ ID NO:64; SEQ ID NO:65; SEQ ID NO:66; SEQ ID NO:67; SEQ ID NO:68; SEQ ID NO:69; SEQ ID NO:70; SEQ ID NO:71; SEQ ID NO:72; SEQ ID NO:73; SEQ

ID NO:74; SEQ ID NO:75; SEQ ID NO:76; SEQ ID NO:77; SEQ ID NO:78; SEQ ID NO:79; SEQ ID NO:80; SEQ ID NO:81; SEQ ID NO:82; SEQ ID NO:83; SEQ ID NO:84; SEQ ID NO:85; SEQ ID NO:86; SEQ ID NO:154; SEQ ID NO:155; SEQ ID NO:156; SEQ ID NO:157; SEQ ID NO:158; SEQ ID NO:159; SEQ ID NO:160; SEQ ID NO:161; and SEQ ID NO:162; said antibody or functional fragment thereof having at least a two-fold higher binding activity for denatured collagen over native collagen, and wherein said antibody or functional fragment thereof does not comprise the following six CDRs: amino acids 6-10 of SEQ ID NO:26; SEQ ID NO:28; SEQ ID NO:30; SEQ ID NO:20; SEQ ID NO:22; and SEQ ID NO:24.

85. (New) The antibody, or functional fragment thereof, of claim 84, wherein said antibody, or functional fragment thereof, comprises: a heavy chain CDR1 consisting of amino acids 6-10 of SEQ ID NO:45; a heavy chain CDR2 referenced as SEQ ID NO:155; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:157; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

86. (New) An antibody, or functional fragment thereof, wherein said antibody, or functional fragment thereof, comprises: a heavy chain CDR1 consisting of amino acids 6-10 of SEQ ID NO:45; a heavy chain CDR2 referenced as SEQ ID NO:155; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:157; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.

87. (New) A grafted antibody, or functional fragment thereof, wherein said grafted antibody, or functional fragment thereof, comprises: a heavy chain CDR1 consisting of amino acids 6-10 of SEQ ID NO:45; a heavy chain CDR2 referenced as SEQ ID NO:155; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:157; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77, wherein the heavy chain CDRs are grafted into a VHIII/JH6 heavy chain variable region framework referenced as SEQ ID NO:8.

88. (New) The grafted antibody, or function fragment thereof, of claim 87, wherein said VHIII/JH6 heavy chain variable region framework is altered to contain at least one amino acid substitution.

89. (New) A grafted antibody, or functional fragment thereof, wherein said grafted antibody, or functional fragment thereof, comprises: a heavy chain CDR1 referenced as SEQ ID NO:45; a heavy chain CDR2 referenced as SEQ ID NO:155; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:157; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77, wherein the heavy chain CDRs are grafted into a VHIII/JH6 heavy chain variable region framework referenced as SEQ ID NO:8.

90. (New) An antibody, or functional fragment thereof, wherein said antibody, or functional fragment thereof, comprises: a heavy chain CDR1 referenced as SEQ ID NO:45; a heavy chain CDR2 referenced as SEQ ID NO:155; a heavy chain CDR3 referenced as SEQ ID NO:63; a light chain CDR1 referenced as SEQ ID NO:157; a light chain CDR2 referenced as SEQ ID NO:22; and a light chain CDR3 referenced as SEQ ID NO:77.